

REMARKS

This Amendment is being filed in Response to the March 31, 2009 non-final Office Action. In the Office Action, claims 51-117, 127-156, 160-265, 267-284, 290-298, and 304-322 were rejected under 35 U.S.C. §101. Claims 156 and 270 also stand rejected under 35 U.S.C. §112 as being “single means claims.”

Applicant thanks the Examiner for indicating that the January 28, 2009 amendments render claims 118-126, 157-159, 266, 285-289, and 299-303 allowable over the previous §101 rejections. In order to expedite prosecution, Applicant amends independent claims 51, 127, 156, 157, 160, 228, 237, 266, 267, 270, 271, 281, 290, 294, and 304 herein to recite the subject matter which the Examiner identified as statutory at page 3 of the Office Action. Applicant further amends claim 305 to correct a typographical error.

Applicant cancels claims 307-322 herein without prejudice or disclaimer.

After entry of this amendment, claims 51-306 will remain pending, of which claims 51, 118, 127, 156, 157, 160, 228, 237, 266, 267, 270, 271, 281, 285, 290, 294, 299, and 304 are independent.

Applicant thanks the Examiner for the courtesy of an interview on June 26, 2009. The Examiner offered a number of helpful suggestions for amending the claims to overcome the outstanding §101 rejections. The suggested amendments are included in this response.

Applicant respectfully traverses the outstanding §101 rejections in light of the amendments to the independent claims.

I. Claims 51-117

Applicant amends claim 51 to recite *a computer comprising a memory and a display device*. Applicant further amends claim 51 to recite *encoding, in said computer, said data as parameters of a plurality of Fourier components in Fourier space and displaying ,said recognized pattern on said display device*. These amendments correspond to the amendments made to claim 118 in the January 28, 2009 response, which the Examiner has indicated rendered

claim 118 allowable (Office Action at page 3). In particular, the Examiner states that the recitation of a computer having a memory and a display tie a claim to a particular machine, and because several of the recited elements are performed in a computer, the claimed method recites statutory subject matter under §101. Applicant respectfully submits that the amendment to claim 51 ties claim 51 to a particular machine for the same reasons as claim 118.

Accordingly, Applicant respectfully submits that independent claim 51 recites patentable subject matter under §101 because claim 51 is tied to a particular machine. Claims 52-117 depend from claim 51, and therefore include each and every element of claim 51. Therefore, Claims 52-117 recite patentable subject matter under §101 for at least the same reasons as claim 51.

II. Claims 127-155

The Examiner indicates that claim 127 is not directed to statutory subject matter because “the claimed processing steps are not absolutely tied to a particular machine, because data can be readout from a memory of a computer, processed without the computer, and stored back into a memory of the computer” (Office Action at pages 5-6). Accordingly, Applicant amends claim 127 to recite that at least steps b) – e) and g) – i) are performed *using the computer*.

Accordingly, Applicant respectfully submits that claim 127 recites patentable subject matter because claim 127 is tied to a particular machine. Claims 128-155 depend from claim 127, and therefore include each and every element of claim 127. Therefore, Applicant respectfully submits that claims 127-155 recite patentable subject matter under §101.

III. Claim 156

The Examiner rejects claims 156 under §112 for being a single means claim. Specifically, the Examiner indicates that claim 156 “has only one hardware component, the recited memory, with loaded software.” Applicant amends claim 156 to recite *a display device for displaying the recognized pattern*. Applicant respectfully submits that this amendment clarifies that claim 156 is not directed to a single means which does not appear in combination

with another recited element of means, because the amended claim recites an additional hardware component of the recited computer, namely a display device.

Further, the Examiner rejects claim 156 under §101. Applicant amends claim 156 in a manner similar to allowable claim 266. Specifically, the Examiner indicates that claim 266 recites statutory subject matter because “the data are transformed and displayed on a display” (Office Action at page 3). Applicant respectfully submits that the amendment to claim 156 also transforms the data and displays the transformed data on a display. Accordingly, claim 156 recites statutory subject matter for at least the same reasons as claim 266.

For at least the reasons above, Applicant respectfully request that the Examiner reconsider and withdraw the §101 and §112 rejections of claim 156.

IV. Claims 160-227

Applicant amend claim 160 to recite that at least the “encoding,” “adding,” and “providing” elements of the recited method are performed *using the computer*. Applicant respectfully submits that claim 160 is tied to a particular machine or apparatus, namely the computer, for the same reasons as allowable claim 157

In light of the above, Applicant respectfully submits that claim 160 recites patentable subject matter under §101. Claims 161-227 depend from claim 160, and therefore include each and every element of claim 160. Accordingly, Applicant respectfully submits that claims 160-227 recite patentable subject matter under §101.

V. Claims 228-236

Claim 228 is rejected for the same reasons as claim 160, above. Applicant amends claim 228 to recite that at least the claim element of “forming associations” is performed *using the computer*. Accordingly, Applicant respectfully submits that claim 228 is tied to a particular machine or apparatus, namely the computer, for the same reasons as allowable claim 157

In light of the above, Applicant respectfully submits that amended independent claim 228 recites patentable subject matter under §101. Claims 229-236 depend from claim 228, and

therefore include each and every element of claim 228. Applicant therefore respectfully submits that claims 228-236 recite patentable subject matter under §101.

VI. Claims 237-265

Applicant amends claim 237 to recite that at least steps a) – i) are performed *using the computer*. Accordingly, Applicant respectfully submits that claim 237 is tied to a particular machine for at least the same reasons as allowable claim 157.

In light of the above, Applicant respectfully submit that claim 237 recites patentable subject matter under §101 because claim 237 is tied to a particular machine or apparatus. Claims 238-265 depend from claim 237, and therefore include each and every element of claim 237. Accordingly, Applicant respectfully submits that claims 237-265 recite patentable subject matter under §101.

VII. Claims 267-269

Applicant amends claim 267 to clarify that at least steps a) – b) and d) – e) are performed *using the computer*. Accordingly, Applicant respectfully submits that claim 237 is tied to a particular machine for at least the same reasons as allowable claim 157.

In light of the above, Applicant respectfully submits that claim 267 recites patentable subject matter under §101. Claims 268-269 depend from claim 267, and therefore include each and every element of claim 267. Accordingly, Applicant respectfully submits that claims 267-269 recite patentable subject matter under §101.

VIII. Claim 270

The Examiner rejects claims 270 under §112 for being a single means claim. Specifically, the Examiner indicates that claim 270 “has only one hardware component, the recited memory, with loaded software.” Applicant amends claim 270 to recite *means for receiving the complex ordered strings and displaying a pattern recognized using the complex ordered strings on a display*. Applicant respectfully submits that this amendment clarifies that claim 156 is not directed to a single means which does not appear in combination with another

recited element of means, because the amended claim recites an additional hardware component of the recited computer, namely a display device.

Further, the Examiner rejects claim 270 under §101. Applicant amends claim 270 in a manner similar to allowable claim 266. Specifically, the Examiner indicates that claim 266 recites statutory subject matter because “the data are transformed and displayed on a display” (Office Action at page 3). Applicant respectfully submits that the amendment to claim 270 also transforms the data and displays the transformed data on a display. Accordingly, claim 270 recites statutory subject matter for at least the same reasons as claim 266.

Accordingly, Applicant respectfully submits that claim 270 recites patentable subject matter under §101.

IX. Claims 271-280

Applicant amends claim 271 to recite *a computer comprising a memory*. Applicant further amends claim 271 to clarify that several of the elements of the recited method are performed *using the computer*. Accordingly, Applicant respectfully submits that claim 271 is tied to a particular machine for the same reasons as allowable claim 157.

In light of the above, Applicant respectfully submits that claim 271 recites patentable subject matter under §101. Claims 272-280 depend from claim 271, and therefore include each and every element of claim 271. Accordingly, Applicant respectfully submits that claims 271-280 recite patentable subject matter under §101.

X. Claims 281-284

Applicant amends claim 281 to recite that the system recognizes a pattern in information *using a computer*, and further that several of the elements recited in claim 281 are performed *using the computer*. Accordingly, Applicant respectfully submits that claim 281 recites statutory subject matter for at least the same reasons as claim 157.

Claims 282-284 depend from claim 281, and therefore include each and every element of claim 281. Accordingly, Applicant respectfully submits that claims 281-284 recite patentable subject matter under §101.

XI. Claims 290-293

Applicant amends claim 290 to clarify that several of the elements of the computer program are performed *using the computer*. Accordingly, Applicant respectfully submits that claim 294 is tied to a particular machine for at least the same reasons as claim 157.

In light of the above, Applicant respectfully submits that independent claim 290 recites allowable subject matter under §101. Claims 291-293 depend from claim 290, and therefore include each and every element of claim 290. Accordingly, Applicant respectfully submits that claims 290-293 recites patentable subject matter under §101.

XII. Claims 294-298

Applicant amends claim 294 to clarify that at least steps a) – i) are performed *using the computer*. Accordingly, Applicant respectfully submits that claim 294 is tied to a particular machine for at least the same reasons as claim 157.

In light of the above, Applicant respectfully submits that claim 294 recites patentable subject matter under §101. Claims 295-298 depend from claim 294, and therefore include each and every element of claim 294. Accordingly, Applicant respectfully submits that claims 294-298 recite patentable subject matter under §101.

XIII. Claims 304-306

Applicant amends claim 304 to recite that several of the program code means are carried out *using a computer*. Accordingly, Applicant respectfully submits that claim 304 is tied to a particular machine for at least the same reasons as claim 157.

In light of the above, Applicant respectfully submits that claim 304 recites patentable subject matter under §101. Claims 305-306 depend from claim 304, and therefore include each and every element of claim 304. Accordingly, Applicant respectfully submits that claims 304-306 recite patentable subject matter under §101.

XIV. Claims 307-322

As claims 307-322 are canceled herein, Applicants respectfully submit that the rejection of claims 307-322 is moot.

CONCLUSION

In view of the above amendment, Applicant respectfully submit that the pending application is in condition for allowance. If the Examiner deems that issues persist, the Examiner is encouraged to contact the Applicants' attorney.

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Respectfully submitted,

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